

The Model for Improvement

UDOH Diabetes Telehealth Series

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materials used from the IHI (Institute of Healthcare Improvement)

Objectives

- 1) Understand the *Model for Improvement**
- 2) Develop an Aim Statement, Measurement Plan, and Improvement Plan
- 3) Understand rapid cycle improvement

**Associates in Process Improvement*

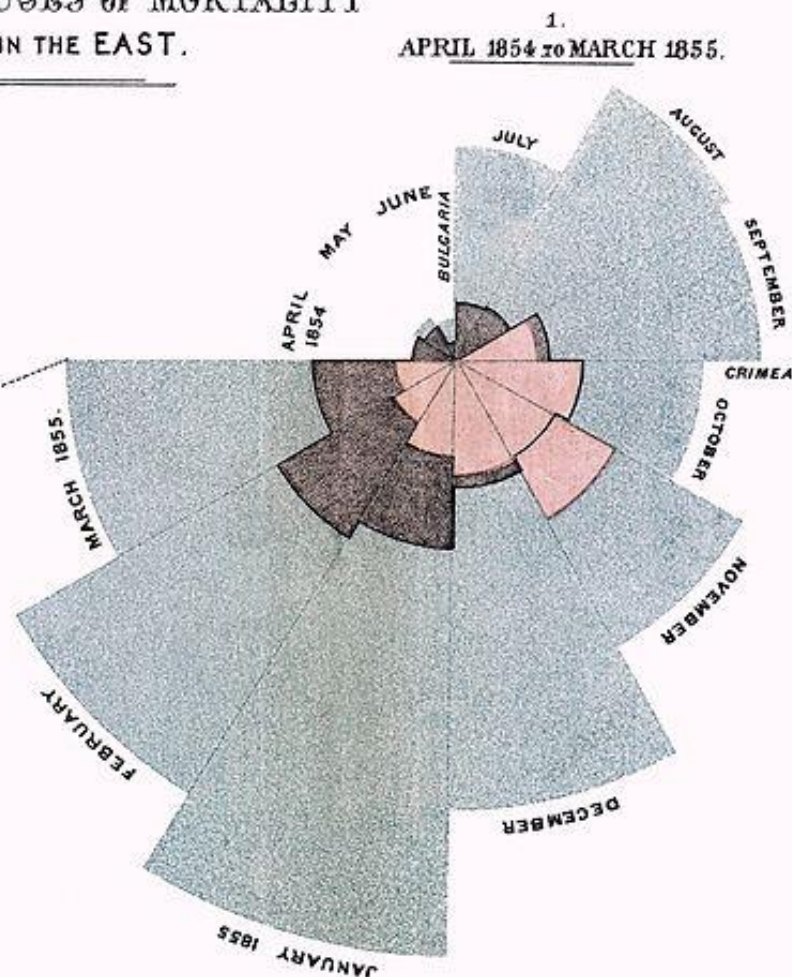
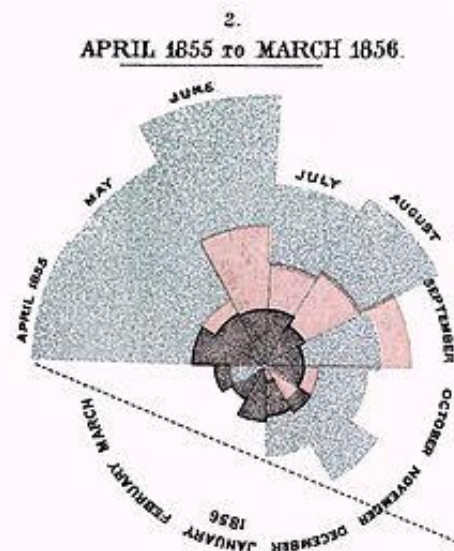




Florence Nightingale



DIAGRAM OF THE CAUSES OF MORTALITY IN THE ARMY IN THE EAST.



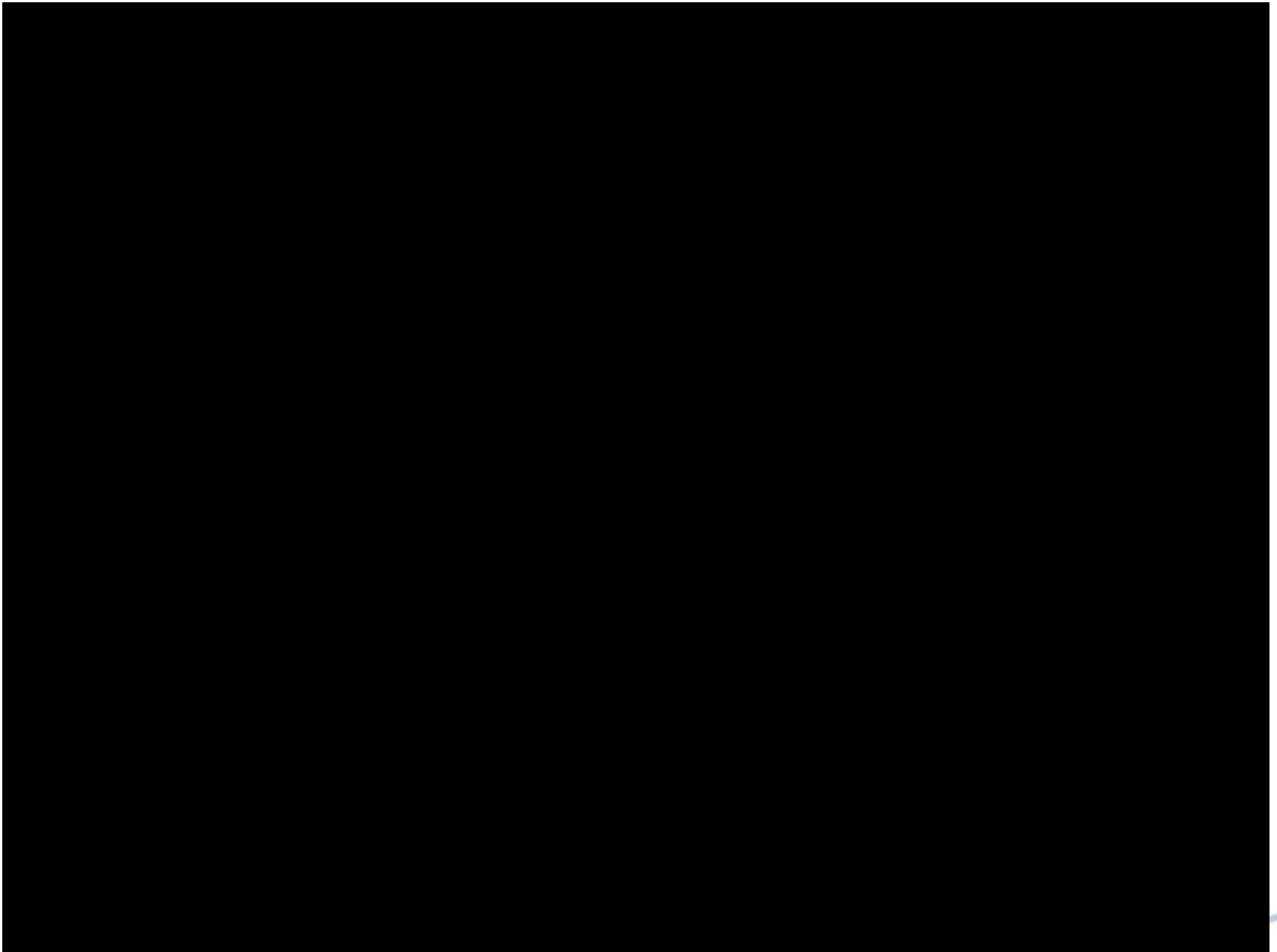
The Areas of the blue, red, & black wedges are each measured from the centre as the common vertex.

The blue wedges measured from the centre of the circle represent area for area the deaths from Preventable or Mitigable Zymotic diseases, the red wedges measured from the centre the deaths from wounds, & the black wedges measured from the centre the deaths from all other causes.

The black line across the red triangle in Nov^r 1854 marks the boundary of the deaths from all other causes during the month.

In October 1854, & April 1855, the black area coincides with the red, in January & February 1856, the blue coincides with the black.

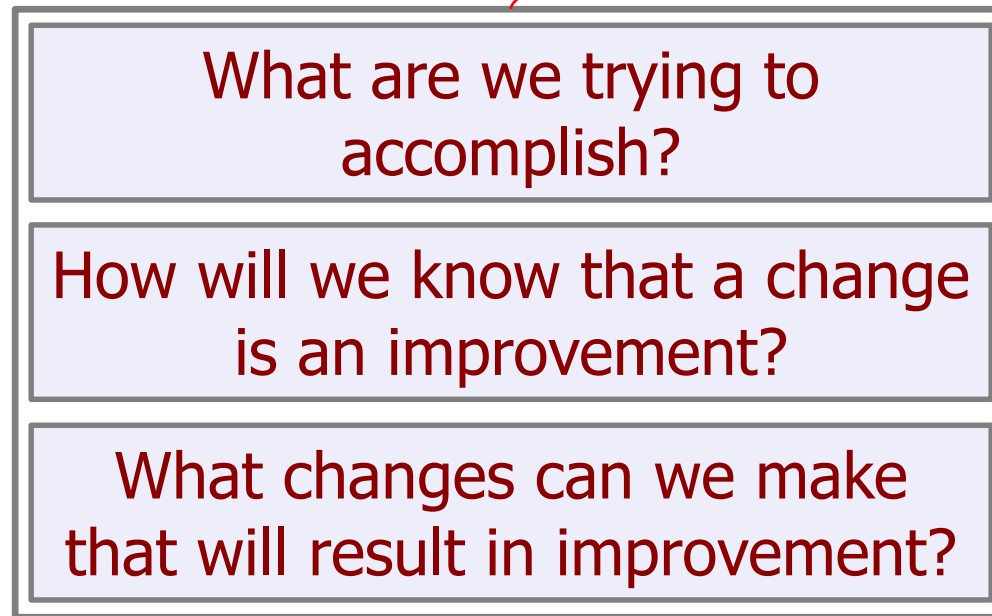
The entire areas may be compared by following the blue, the red & the black lines enclosing them.



Animation credit: Ian Short at understandinguncertainty.org

The Model for Improvement PDSA

Identify the Gap



Recognition of Quality Gap - Opportunity for Improvement

- Can be a vague impression (hunch)
- Report review
- Sentinel events
- We want a better outcome (hope)
- Taking Stock Exercise



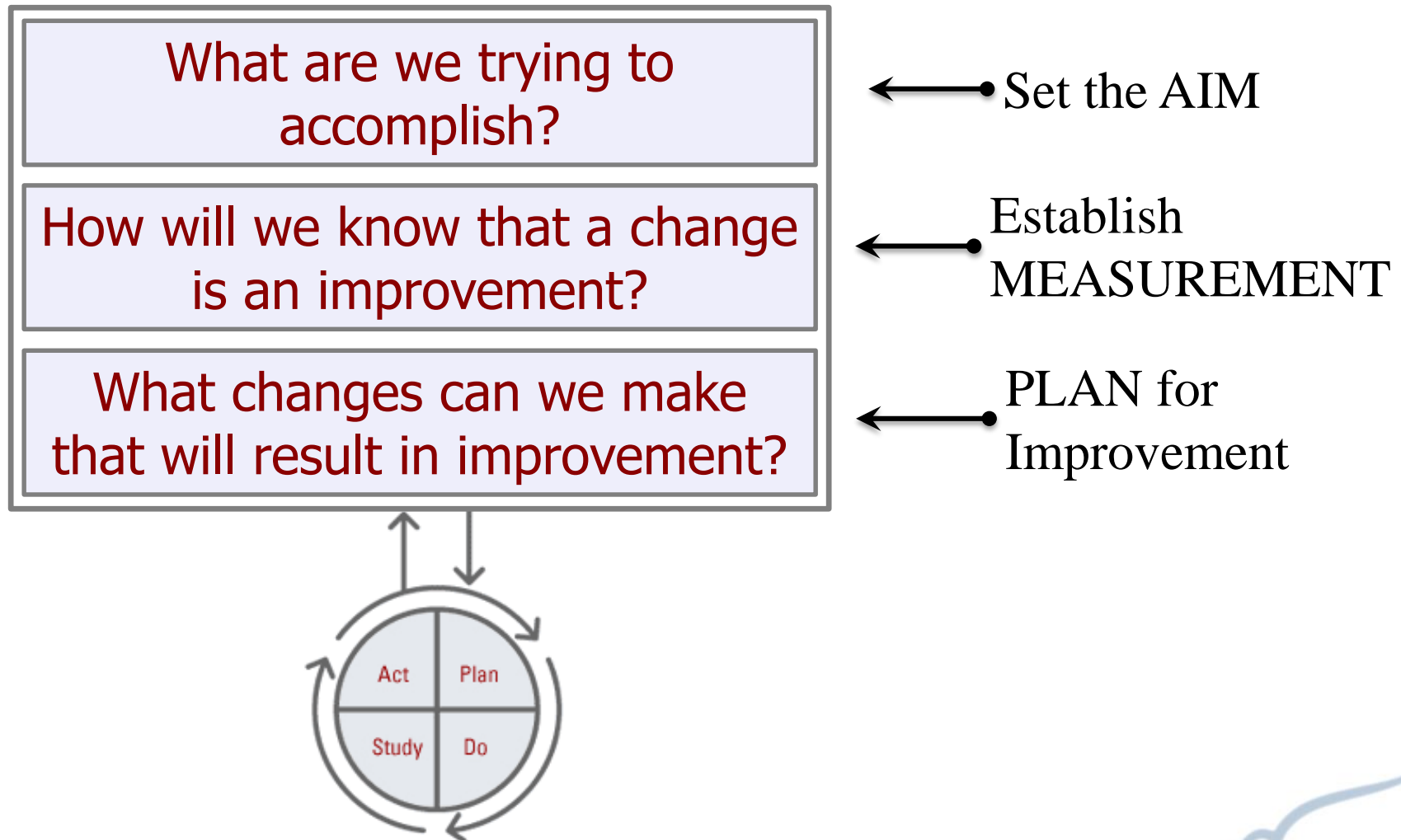
Exercise #1

Take a minute and review from your recent experience one opportunity for improvement or quality gap

Please write it down



The Model for Improvement PDSA cycles



Step #1 - Setting the AIM – What are we trying to accomplish?

- State the aim clearly (SMART acronym)
- Include **numerical goal** and **time frame** that require fundamental system change
- Set stretch goals
- Avoid aim drift
- Be prepared to refocus the aim



Step #2 - Establishing measures – How will we know that a change is an improvement?

- Plot data over time
- Seek usefulness, not perfection
- Use sampling
- Integrate measurement into the daily routine
- Use qualitative and quantitative data



Exercise #2

Take a minute and write an AIM statement based on the improvement opportunity identified in Exercise #1

Remember to include a numeric goal (measure) and time frame



Step #3 – Overall Plan for Improvement

- Avoid “the same” responses
- Implement recommended practices guidelines
- Think processes and systems of work
 - Simplify processes
 - Reduce waste or unnecessary redundancies
 - Strengthen hand offs
- **Creative thinking**
- Appropriate use of new or existing technology



Step #3 – Overall Plan for Improvement

- 1) Describe change (strategies)
- 2) **Predict** outcome
- 3) List steps needed
- 4) Plan for collection of data



“Every system is perfectly
designed to get the results it
gets.”

Paul Batalden, M.D.



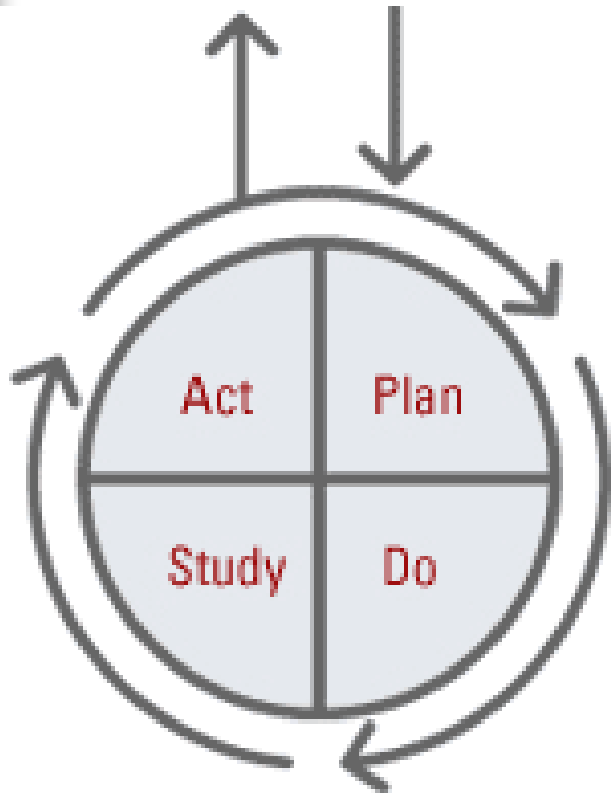
Exercise #3

Take three or four minutes and outline your Global Plan

- 1) Describe change (strategies)
- 2) Predict outcome
- 3) List steps needed
- 4) Plan for collection of data



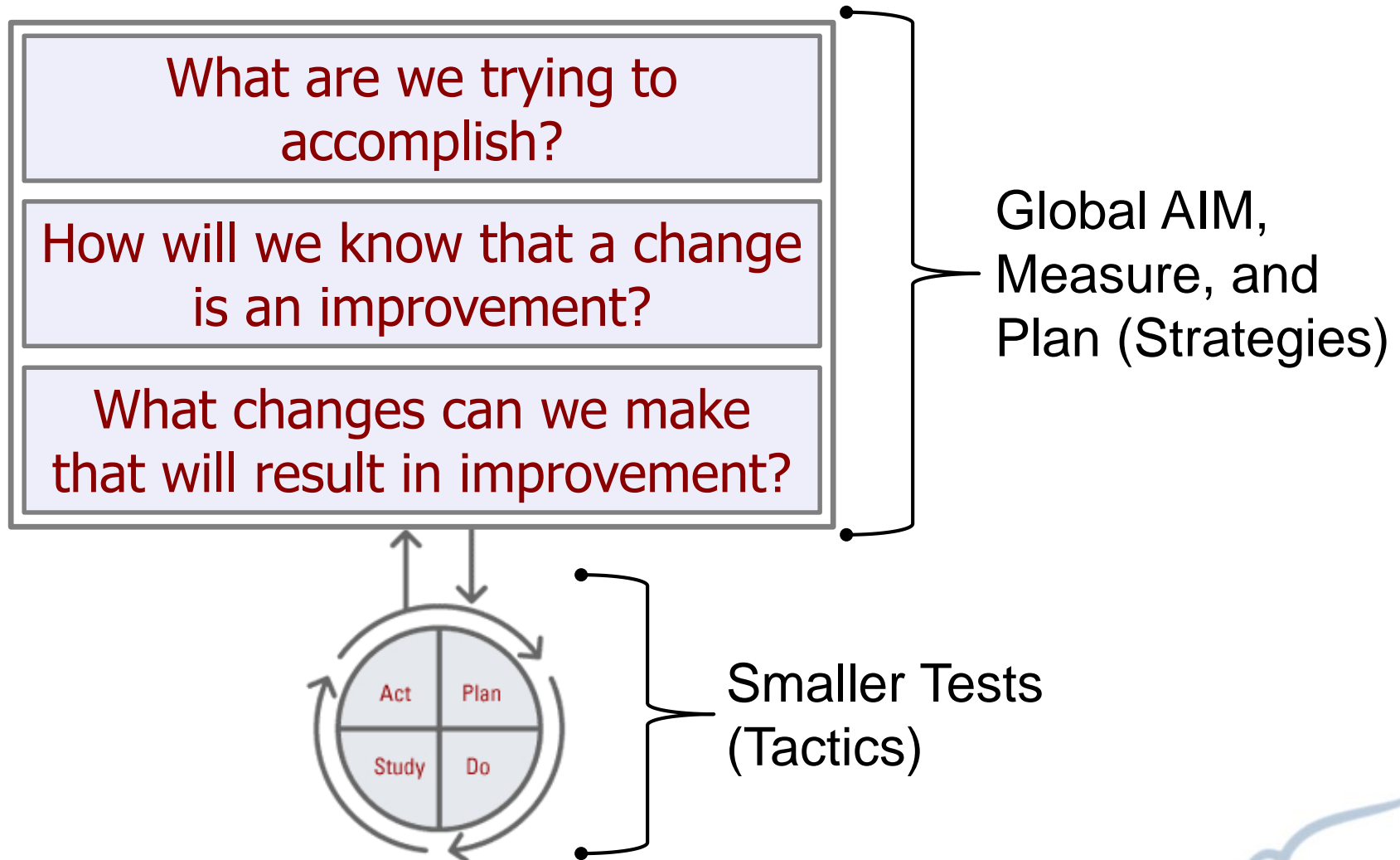
PDSA (Plan-Do-Study-Act)



Also known as:

- PDCA (Check instead of Study)
- The Deming Cycle/Wheel
- The Shewart Cycle
- The Learning and Improvement Cycle

The Model for Improvement PDSA cycles



Classifying PDSA cycles

The Chronic Care Model

(Mid-level Theory)

- Clinical Information Systems
- Delivery System Design Community
- Decision Support
- Self Management
- Organizational Support

Human Factors Science

(Micro-level Theory)

- **Actors**
- **Behaviors**
- **Decisions**
- **Habits**



Plan




Sequence:

- 1) Describe first (or next) change (tactic)
- 2) Predict outcome**
- 3) List tasks needed
- 4) Plan for collection of data



DO – Carry it Out

A faint background diagram of the PDCA (Plan-Do-Check-Act) cycle. It consists of a circle divided into four quadrants labeled 'Plan' (top), 'Do' (right), 'Study' (bottom), and 'Act' (left). Arrows indicate a clockwise flow from Plan to Do, Do to Study, Study to Act, and Act back to Plan. Additionally, there are two vertical arrows: one pointing up on the left side and one pointing down on the right side, suggesting a feedback loop or continuous improvement.

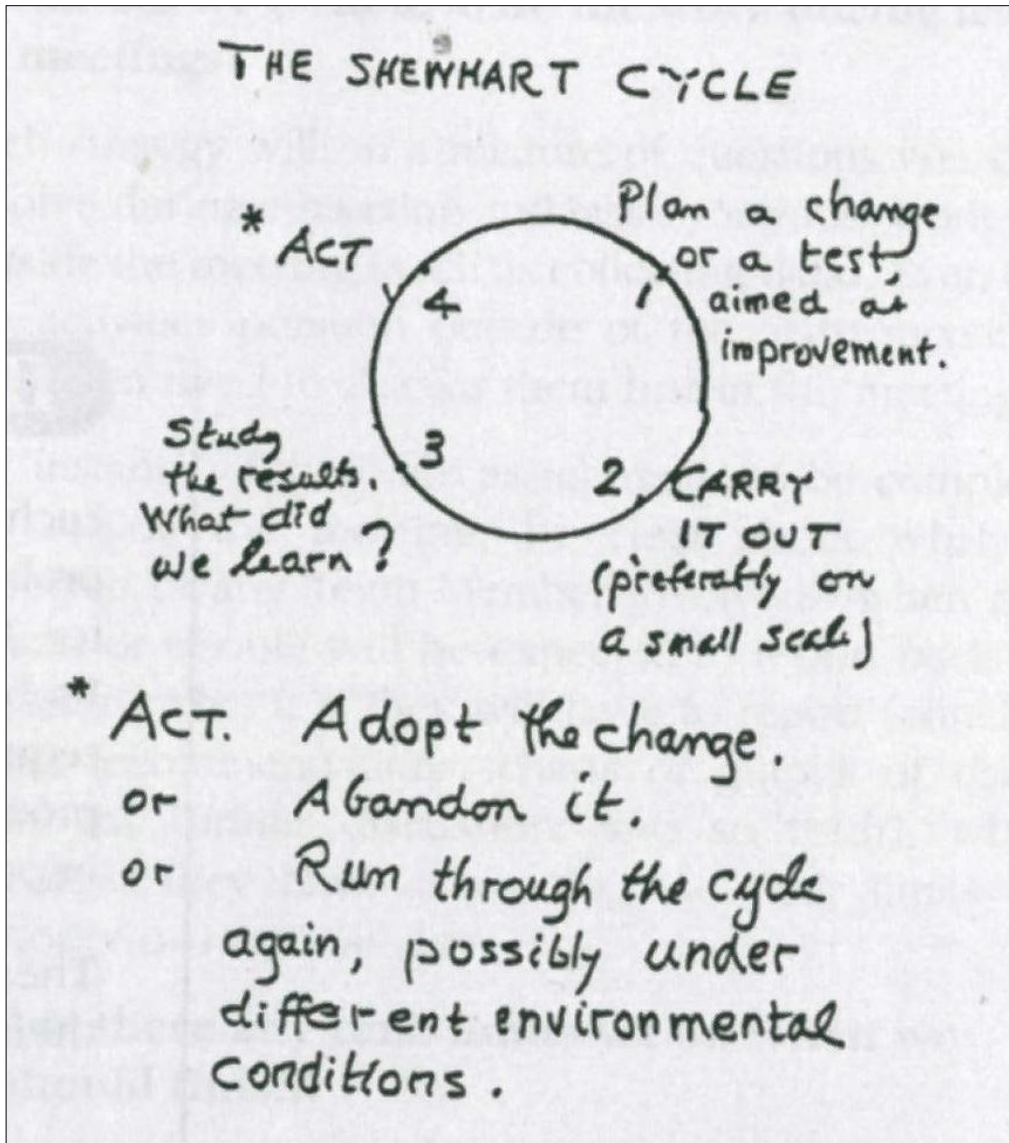
- Implement (preferably on a small scale)
 - Document problems and unexpected observations
 - See plan through to completion
 - Motivations to carry it out
- 
- A decorative blue swoosh or wave-like graphic element located in the bottom right corner of the slide.

Study or Check – What did we learn?

- Review the Data / take survey
- Compare the data to your predictions
- What worked or went well? What did not?
- Summarize and Reflect on what was learned -- Draw Conclusions

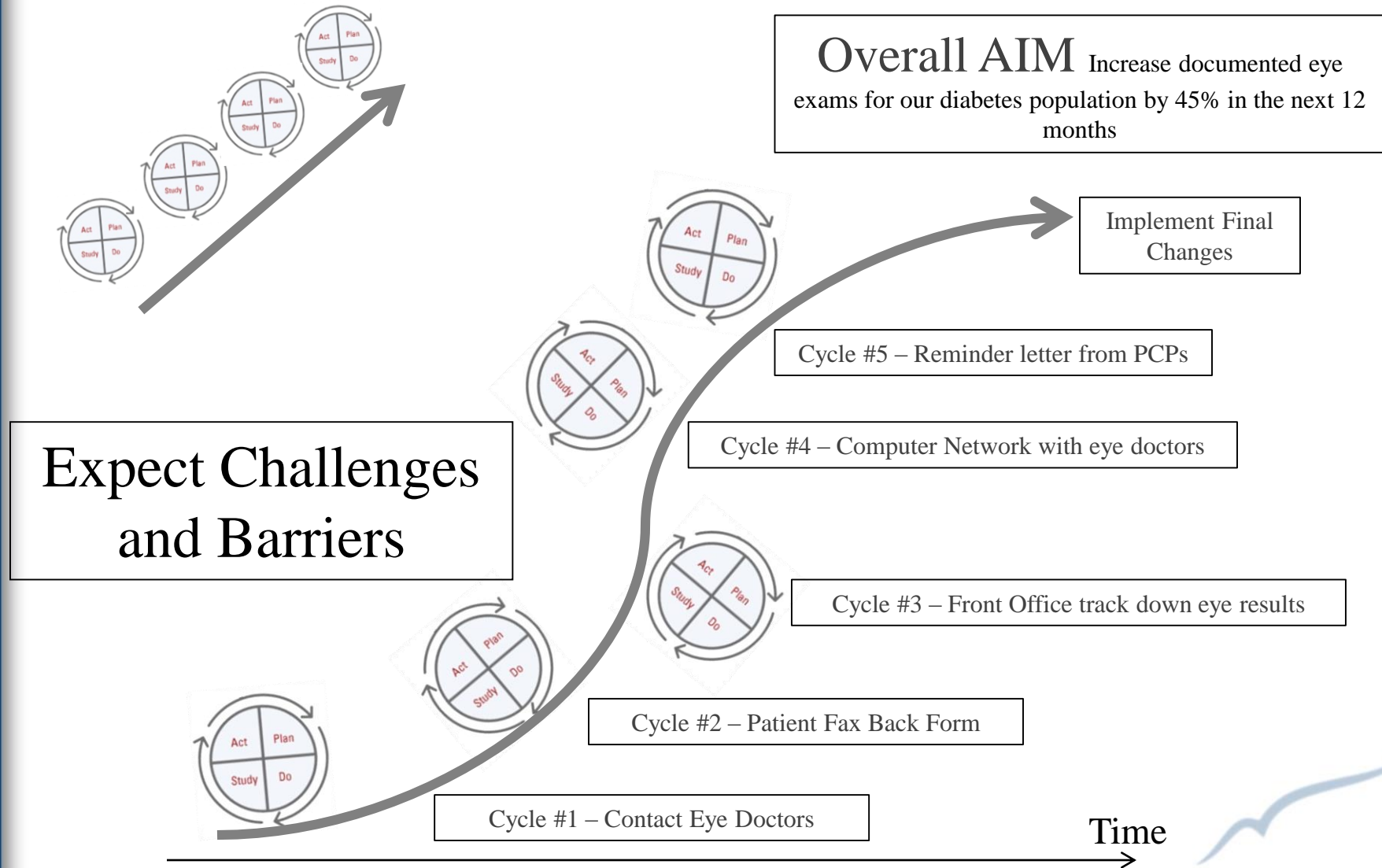


ACT

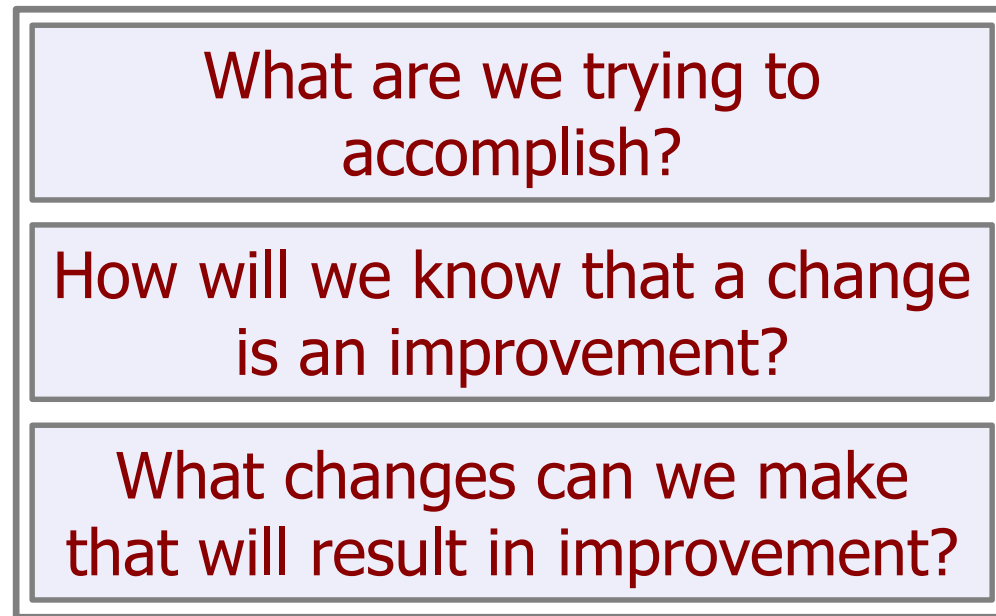


- Adopt it
- Abandon it
- More study needed
- Modify overall aim, measure, or plan
- Create new plan

Rapid Cycle - Multiple Cycles



The Model for Improvement PDSA cycles - Summary



PDSA Worksheet for Testing Change

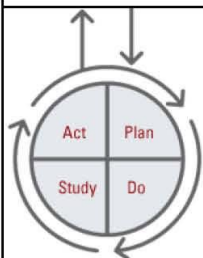
Instructions: Fill out for each test conducted. Replace Italicized statements

Cycle #: ____ Date: ____

Gap: *Statement of improvement opportunity or gap in quality.*

Aim: *Statement of achievable goal including numerical measure and timeframe.*

Overall Plan: *Statement of overall improvement action plan or strategies.*



Plan

First (or next) change: *Describe your first (or next) test of change. What is the first tactic?*

Prediction: *What will happen when the test is carried out?*

Tasks Needed: *List the tasks needed to set up this test of change (who, what, where, when)*

Data Collection: *Plan for collection of data (who, what, where, when)*

Do

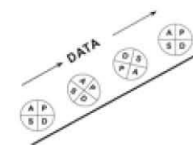
Describe what actually happened, including problems and unexpected observations, when you ran the test.

Study

Describe the measured results and how they compared to the predictions. Summarize and reflect on new knowledge learned.

Act

Describe what modifications to the plan will be made for the next cycle from what you learned.



Questions ???

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